a. Design a Combinational Logic Circuit to Convert the code Excess-4 to 2, 4, 2, 1 Code.

b. A seven-segment display device (fig-b) is capable to display both alphabets and decimal digits. You need to design a combinational circuit which will show the active segments for 0,1,2,3,5,7, 8, 9 (decimal).

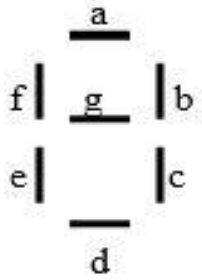

Fig.: b

The following table represents the active segments for each decimal digit.

Digit	Segments Activated
0	a,b,c,d,e,f
7	a,b,c

c. Design a Combinational Logic Circuit to Convert the 5-Bit BCD to Binary Equivalent.